TRANSLATION: Letter to the European Patent Office, Munich 80298

Date: 13 April 2004

Office File Number: PCT/EPO3/05350

Title: "Method and device for fastening components to circumferentially closed hollow profiles"

Our File: P036647/WO/1

Response to the written report under Rule 66 PCT of 24 February 2004:

A replacement page 15a is sent to the Office attached hereto to replace page 15 of the original documents, the replacement page 15a containing a clarified claim 15 which contained no problematic features. Thus the distinctive feature of claim 15 contains, in the sense of the invention and also shows from the individual embodiments, that a die is provided within the hollow profile (3) into which the pressure means for the clamping of the component (2) to the hollow profile (3) plunges with the formation of a double-walled indentation (10). The purpose described in this case serves for the concretizing explanation of the nature of the pressure medium and of the die. In our opinion the new claim15 satisfies the requirements of Article 6 PCT.

We are not in agreement with the Office's statements regarding the lack of novelty on the basis of the state of the art disclosed by the references (EP-A 0823296 and EP-A 0749892) under Article 33 (2) PCT .

Reference 1 (EP 0823296 A2) shows a method for fastening a tube with a rib. The tube is tightly clamped to the rib by piercing assembly, which can be learned from Figures 4 to 6. According to column 4, lines 26 sqq. The underside of the tube 1 lies on a die M which is provided with an opening A. Accordingly, the plunger must be introduced into the inside of the tube in order to force the tube wall together with the rib material into the opening in the die. As a result an internal mechanical pressure is applied locally to the walls of the rib and of the tube that are to be assembled together, and a double-walled outward bulge is forced out of the walls. This, however, is entirely the opposite of the invention, in which it starts out from an

application of pressure from an external source, so that the walls are forced into the interior of the hollow profile to form a double-walled indentation. Thus the subject of the application according to claim 1 is novel in relation to reference 1. From the latter the technician could learn nothing towards using the push-through method in reverse, so that inventive activity must be assumed in order to arrive at the claimed invention. It must be added that by the known method , due to the formation of an outward bulge on the hollow profile, a different product is obtained than with the method of the invention, wherein a double-walled indentation is driven into the hollow profile.

Since in our view the original claim 1 is able to stand against Reference 1, the claims that follow, 2 to 14, are also able to stand.

Also the first apparatus claim, claim 15, is novel in relation to Reference 1 and should also be considered inventive activity. Thus, in contrast to reference 1, according to the characteristic of the newly submitted claim 15, the pressure medium is situated locally outside of the hollow profile, and inside the profile a die is provided. In Reference 1 the reverse is the case according to column 4 and lines 23 to 51. The technician can therefore also obtain no incentive from reference 1 arrive without inventive activity at the subject matter of the newly submitted claim 15.

Reference 2, DP 0749892 A1 should not be used to make questionable the patentability of claim 1 and of newly submitted claim 15 in regard to novelty and inventive action. It can indeed be perceived from the document that a trough-like indentation is formed on a hollow profile, in which a second component is congruently clamped, but this is achieved in an entirely different manner. Thus, according to page 3, lines 2 to 27, first an initially tubular starting object is placed in a tool and then hydraulically expanded by a high internal pressure, so that a first hollow profile is formed. Here the trough-shaped receiver is created on this hollow profile. Then, in a second operation, a second tubular starting piece is inserted into the said tool in addition to the already transformed first hollow profile. Then the second hollow profile is inflated, which applies itself conformably to the walls of the receiver of the first hollow profile. In an opposite manner, the walls to be joined together have applied to them locally not a high internal pressure but an external

pressure, so that the walls are forced into the interior of the hollow profile with the formation of a double-walled indentation. The walls are mated together. The principal difference thus is that the walls to be joined together are forced in simultaneously.

Furthermore, the newly submitted claim 15 proves that, within the hollow profile, a die is provided into which the pressure means for the clamping attachment of the component to the hollow profile plunges, applying pressure to the walls in contact with one another and forming a double-walled indentation. This is, as stated, the opposite of the tool principle of Reference 2 in which the first hollow profile formed must be supported massively in the area of its trough-like receiver, so that the material of the second hollow profile can be positively pressed into this receiver. Otherwise the first hollow profile, as the internal high pressure remains in it, would again expand to the extent that the receiver formed is pressed out again. If the fluid pressure in the first hollow profile is less than that in the second profile, the first profile would be pressed together by the second profile. How this actually is ultimately resolved, Document 2 does not say. In any case, the tool principle cannot coincide with the device of the invention, since the trough-like receiver is already formed on the first hollow profile. The subjects of claim 1 and of the newly submitted claim 15 are thus novel in relation to Reference 2, in our consideration, and are based on inventive action.

Since claim 15 can thus remain standing in relation to both References 1 and 2, the sub-claims appended to it also remain standing.

We think that the invention now claimed according to claims 1 and 15 was able to be found, as explained above, only by applying original, progressive and extraordinary thinking, so that the subject matter of the application according to claim 1 and the clarified subject matter according to claim 15, can be considered not only novel but also as displaying inventive action to an appreciable extent. It should also be said that even by considering the two References 1 and 2 together would an expert be able to arrive at the solution offered by the invention according to claims 1 anf 15.

It is requested that, if what is stated above is agreeable, the Office find the continued claim 1 and the newly submitted claim 15 to be patentable. If the Office is unable to agree with our comments an interview is requested.

DaimlerChrysler AG

Attachment

Replacement Page 15a (in triplicate)

Bergen-Babinecz
(by power of attorney)

[Translation of new claim 15, only:)

15. Device for fastening components to initially closed hollow profiles, with a receiver in which the hollow profile and the component is [are?] held such that walls of the hollow profile and of the component lie against one another, and with a pressure means by the action of which the walls can be joined together positively, characterized in that the pressure means is arranged locally outside of the hollow profile (3) and is made movable, and that within the hollow profile (3) a die is provided into which the pressure means plunges for the clamp-fastening of the component (2) to the hollow profile (3), pressing into one another the walls (4, 5) which lie against one another and forming a double-walled indentation (10).